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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/174,957	12/28/1993	SHIRO KAMIYAMA	024703006	9165

21839 7590 12/17/2002

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EXAMINER

LEADER, WILLIAM T

ART UNIT	PAPER NUMBER
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1741

DATE MAILED: 12/17/2002

27

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 08/174,957	Applicant(s) KAMIYAMA ET AL.	
	Examiner William T. Leader	Art Unit 1741	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 3,4,6 and 16 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and 7-15 is/are allowed.
- 6) ☒ Claim(s) 2,5 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

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1. In paper number 5, mailed on July 14, 1994, applicant was required to elect a single disclosed species for prosecution on the merits. In the paper filed on August 12, 1994, applicant elected to prosecute the species of hydration oxidation treatment and identified claims 1, 7-15 and 17 as readable thereon. Newly presented claim 17 was identified by applicant as being generic. Claims 1, 7-15 and 17 were finally rejected in paper number 11, mailed on November 2, 1995. The rejection of these claims directed to the elected species of hydration oxidation treatment was reversed by the Board of Patent Appeals and Interferences in the decision mailed February 28, 2002, paper number 25.

2. During a telephone interview on September 17, 2002, applicant's attorney, Charles Jew, was asked whether, in view of the decision by the Board, applicants would prefer to pass the application to issue by canceling claims directed to the nonelected and nonexamined species, or to continue prosecution of the nonelected species. After conferring with applicants, Mr. Jew requested that prosecution be continued.

3. The next recited species after the previously elected hydration oxidation treatment is coating type chromating, as recited in claim 2. This species, and claims readable thereon, are now under consideration.

The status of the claims is as follows:

Claims 1 and 7-15, directed to hydration oxidation treatment, stand allowed

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for the reasons given by the Board in paper number 25.

Claims 2 and 5, readable on the coating type chromating species, are under consideration.

Claims 3, 4, 6 and 16 remain withdrawn from consideration as being directed to nonelected species.

Claim 17, which is generic and reads on the coating type chromating species, is also under consideration.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35

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U.S.C. 103© and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 2, 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sopp, Jr. (3,655,467) combined with McAuliffe et al (5,104,465).

6. The Sopp, Jr. patent is directed to a process for etching an aluminum base. Representative aluminum base alloys are aluminum-magnesium alloys, especially those of the 5000 series. Other alloys are heat-treatable aluminum-magnesium-silicon alloys such as 6061 (column 2, lines 29-41). The aluminum workpiece is etched in a single step in an alkaline solution which contains a soluble pyro- or polyphosphate (column 1, lines 45-49). Thus, the solution would have a greater than 7. The solution may contain one or more chelating agents (column 2, lines 20-21). Use of the etching solution promotes adhesion of subsequently applied chromate films (column 1, lines 61-65). This chromate film corresponds to the coating type chromating recited in instant claims 2 and 17. Sopp, Jr. teaches that aluminum alloys which have been treated with a chromate conversion coating and painted are useful in making beverage cans (column 1, lines 12-22). The painting step following the step of applying a chromate conversion coating corresponds to the step of post-treating by coating recited in instant claim 5.

7. Instant claims 2, 5 and 17 differ from the process of Sopp, Jr. by reciting a step of heating the aluminum-magnesium alloy at a temperature of 200 ° or above.

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As noted above, Sopp, Jr. does teach that the etching process can be used on heat-treatable alloys but does not specify the temperature to which the alloy has been heated. The McAuliffe et al patent is directed to aluminum alloy sheet stock which can be used for making cans. At column 3, lines 21-43, McAuliffe et al describes a prior art process in which a melt of 3004 alloy, or an alloy in which the combined concentration of manganese and magnesium is between 2 and 3.3 weight percent, is cast and then held for 2 to 15 minutes between 400 °C and the alloy's liquidus temperature, hot rolled at a temperature between 300°C and the non-equilibrium solidus temperature, coiled and cooled to room temperature. A first cold rolling stage reduces the thickness by at least 50 percent and is followed by a flash annealing stage at 350 to 500 °C and a second cold rolling. Thus, McAuliffe et al teaches treatment of an aluminum-magnesium alloy at a temperature of 200 °C or above as recited in claims 2 and 17.

8. The prior art of record is indicative of the level of skill of one of ordinary skill in the art. It would have been obvious at the time the invention was made to have utilized the etching and coating method of Sopp, Jr. to have processed the heat treated aluminum-magnesium alloy of McAuliffe et al because improved adhesion of a chromate coating and paint would have been achieved as taught by Sopp, Jr.

9. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being

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indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.


Claim 17 recites a temperature of 200° but does not specify what temperature scale is used. Note that claim 2 recites a temperature of 200 °C.

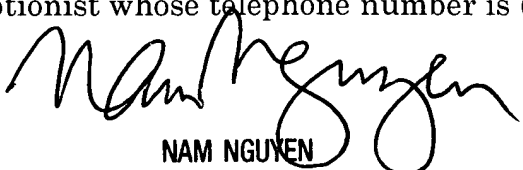
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Gregory et al (4,778,533) patent is directed of a method for treating an aluminum-magnesium alloy sheet in an alkaline-based cleaner. Gregory et al recognizes that two-stage cleaning processes are costly and suggests the use of a one-step process. See the abstract and column 1, lines 57-59.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Leader, whose telephone number is (703) 308-2530. The examiner can normally be reached Mondays-Thursdays and every other Friday from 7:30 AM to 4:00 PM eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached at (703) 308-3322. The fax phone number for *official* after final faxes is (703) 872-9311. The fax phone number for all other *official* faxes is (703) 872-9310. Unofficial communications to the Examiner should be faxed to (703) 305-7719.

Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is (703) 308-0661.

  
William Leader:wtl  
December 12, 2002

  
NAM NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700